grs.). More than eight grammes should never be given, since in above that quantity it becomes a deadly poison.

8. A valuable and essential remedial agent in the hands of the understanding physician, it may become a dangerous poison in those of inexperienced and superficial persons.

TREATMENT OF HYPERTROPHIES AND ATROPHIES.—The following are the conclusions of a memoir by M. Dally (*Gaz. Hebd.*) *La France Medicale*, March 20 :

1. It is important in practice to distinguish first of all the trophic disorders, and especially the hypertrophies which depend upon a primitive acute or chronic alteration of the nervous centres, and those which have their point of departure from a direct and primary lesion of the peripheral organs.

2. The first are generally incurable ; but they can usually be much diminished when their locality is primarily cerebral, or when they take on an acute course in the cord that can be modified at a period near its beginning.

3. The hypertrophies of peripheral origin, traumatic, rheumatismal, professional, anæmic, are, on the contrary, usually curable.

4. In the treatment of hypertrophies, the physical agents, caloric manipulations and electricity, may be used with success whenever they reach the primitive lesions. They act in creating local conditions favorable to nutrition, and not in artificially provoking the spinal nerves governing the circulation and secretions. This latter action, if it really takes place, is soon exhausted and unfruitful.

5. Chemical agents seem to have no other action than that of favorably modifying the digestion.

6. The biological agents, such as exercise and gymnastics, cause, when they are effective, functional activities, the conflict of the innervation and the proper function of the elements which seem necessary or at least favorable to trophic processes.

7. The systematic and combined employment of these different agents gives to the physician a powerful influence on the direction of the nutritive functions.

STRYCHNIA AND CURARE.—At the session of the Soc. de Biologie, Feb. 20 (reported in *Gaz. des Hopitaux*), M. Dupuy stated that he had performed some experiments on frogs that demonstrated anew that strychnia and curare did not produce the effects on the nervous system of these animals that had been claimed by MM. Martin-Magron and Bouisson.

1. A frog, to which a large dose of strychnine has been administered, is taken with violent tetanic convulsions, and then falls into a state of complete resolution. If now we irritate the posterior limbs, we do not excite muscular contractions, but if we expose the sciatic nerve, and irritate it directly, we call forth contractions in the muscles supplied by it.

2. If we apply a ligature on the lumbar region of a frog, so as to isolate the whole posterior part of the body, and then give large doses of strychnia, the tetanic convulsions and subsequent relaxation take place. If now, at

this moment, we expose and irritate the sciatic nerve, we produce contraction in the limb supplied by that nerve.

3. If we expose and sever the sciatic nerve very high up, in a frog, protecting it by paper wrapped around its peripheral extremity, and then administer a large dose of strychnia, and after the periods of tetanization and relaxation, we irritate the exposed peripheral end of the sciatic, we always produce muscular contractions in the limb it supplies.

M. Dupuy concluded from these experiments that chlorate of strychnia did not act like curare in paralyzing the terminal ends of the motor nerves, but rather that the cord, on account of the violent contractions of which it is the point of departure, loses its excitability and becomes unable to propagate to the muscles the force to make them contract,

In the discussion of this communication, M. Claude Bernard stated that the only character which permitted us to make an absolute distinction, was as follows : If we ligature the posterior part of the body, so as to isolate it completely from the rest, except by the nerves, and then administer curare, we never obtain convulsions in this posterior part, and the sensibility is preserved ; and if, in the same conditions, we administer strychnia, the convulsions take place, and when they are over there is no trace of sensibility. The action of curare is, therefore, the reverse of that of strychnia. Strychnia acts first on the sensory nerves, then on the motor ; curare, on the other hand, first acts on the motor and then afterwards on the sensory nerves.

INFLUENCE OF ELECTRIZATION ON THE TROPHIC DISORDERS FOLLOWING SECTION OF THE SCIATIC NERVE.—M. Dejerine read before the Soc. de Biologie, March 13 (reported in *Gaz. Med. de Paris*), a note relative to some experiments lately performed by him in the laboratory of Prof. Vulpian, in regard to the influence of the faradic current on the trophic troubles following section of the sciatic nerve in Guinea pigs. He divided the two nerves in two separate animals, and then submitted one posterior limb of each to electrization for five minutes each day. The results are summed up as follows :

"*En resumé* the faradic currents appeared to us, in this experiment, to act in moderating very clearly the trophic disorders observed in the members of an animal after section of the sciatics. In fact, in one of our Guinea pigs they were not developed at all, and in the other they were much less marked and later in their appearance.

"As to the influence of the faradic currents on the muscular fibre in this experiment, it seemed to be in retarding the muscular atrophy, and the diminution of electro-contractility."

ARSENIC.—Eustace Smith, M. D., *Brit. Med. Journal*, May 1, recommends the use in chorea of Fowler's solution, in doses of ten minims, three times a day, immediately after meals. He says, "the influence of this treatment upon the disorder is seen almost immediately, and it is rare for any of the physiological effects of the drug to be observed. By this means, cases of the disease which had resisted smaller doses of arsenic, may be cured in a few days, and even severe cases seldom last longer than a fortnight or three weeks."